mer, by the first heating action of the air and sun, a layer of ice, of a few inches thick upon the surface, would be melted, but the water thus produced would, by being impenetrable to heat, prevent the great body of ice below from being affected. Just as, in reality, the cold water at the surface prevents the warmer water below from being cooled, so then it would prevent the colder ice below from being warmed; and hence the heats of summer passing over without the melting process extending beyond a few feet in depth, the first cold days of the next winter would solidify all again.

In every country, therefore, where at present water is frozen at all in winter, we should have there established the reign of perpetual frost. By the presence of such large masses of ice, the temperature of the ground would be so much reduced, that, in place of the rich herbage of our meadows, and the luxuriant produce of our corn-fields, we should have our country yielding a scanty support to wandering herds of deer, in the mosses and lichens that could be scraped up from beneath the snow. The oaks, the beeches, the horse-chesnuts, which give such beauty to our sylvan scenery, would disappear, and the monotony of wildernesses of the Scotch fir and of the spruce would be varied only by patches of stunted birch. The countries nearer the tropics would be gradually brought into the same condition, by the depression of their mean temperature; and thus, in a short time after water had ceased to possess this peculiar property, the whole surface of the globe would be reduced to the condition of which we now happily only read in the tales of the arctic voyagers; and all commerce, manufactures, and civilization, would be banished from the earth. Of such value is this little peculiarity of water!

A property of water, which, however, unlike the former, it shares with all other liquids, is, that when it freezes it gives out a large quantity of heat; and that conversely, in order that ice may melt, it must obtain, from some other source, a quantity equally considerable. Consequently, water freezes and ice melts very slowly; and that it should melt thus slowly, is of essential importance in animated nature. If in spring or summer, when vegetable life is in activity, when the developement of leaves, of flowers, and fruit, is at its greatest energy, and all the vessels of the plant are distended with its nutritious juices, were it suddenly exposed to cold, the sap would be frozen, and by the expansion of the ice the vegetable tissues torn to pieces, and the plant killed. In the thin extremities, as in the leaves, such is the effect of the frost of a single night; but as the fluids, yielding but gradually up their latent heat, solidify very slowly, the injury does not extend so far as to be beyond the remedial powers of the plant itself. In another way, however, the peculiar latent heat of water is of still more importance. If there was no large collection of water on the globe, the change of seasons would be amazingly more rapid and more remarkable than they at present are. A change in the direction of the wind, the alteration which a few weeks should effect in the position of the sun, would transfer us from the depth of the severest colds of winter to the summer heats. These colds and heats would also be much greater than they at present are, and an approximation to this actually occurs in countries far distant from the sea. The central districts of Europe and of Asia have what are termed continental climates to distinguish them from ours, which is called insular. Their summers are hotter, their winters are much colder, and the spring and autumn seasons of passage, which with us might be said to occupy most of the year, are in those countries of only a few weeks', or even a few days', duration. In fact, when on the cessation of summer the first cold winds tend to bring on the winter, and to bind up our lakes in frost, the first portion of water frozen becomes, by giving up its latent heat, a source of warmth which tempers the chilly air, and retards its action on the remainder. The water freezes thus very slowly. The vegetables, and certain classes of animals, feeling the cold of winter thus gradually coming on, prepare to meet it without injury. The motion of the sap in the one, that of the blood in the other class of living beings, becomes slower, and, dropping its leaves and fruit, the tree retains but its firm trunk, within which its energies are preserved for the ensuing season; whilst the hedgehog, the viper, the frog, and other animals, retire to their hiding-places, and in a state of almost lifeless stupor remain until the warmth of the succeeding spring calls them to renewed existence.

In the formation of the insular climate which we possess, another power of water, however, equally or perhaps more influential, can be traced. There issues continually from the ocean at the equator, as the earth revolves, a current of water considerably warmer than that which bathes our shores. This current becoming sensible first in the Gulf of Mexico, is called the Gulf Stream; it passes obliquely across the Atlantic, floating on the colder water of the ocean, which tends in a direction nearly opposite to replace it, and thus diffuses over the coasts of North America and Europe the heat which it had absorbed within the torrid zone. The northerly winds, which would bring down a sudden winter on us, are therefore tempered by passing over the warmer surface of the ocean; whilst the hot winds from the south, which on the approach of spring might make too premature a change, expend, in passing over the great expanse of sea, a portion of their heat; and thus the transition in both directions is rendered more gradual and harmless.

These are but a few of the important duties which are allotted to water in its place in nature. It in other respects presents an equally interesting subject of examination, and it is one to which we shall return. From its value as the great agent of nutrition to the vegetable world, and the necessity of a supply of it to animals; from its power in modifying the appearance and structure of a country, changing land into sea, and elevating banks where deep water had been before, the philosophers of old looked upon water as the origin of all earthly things, as being above all others the element of nature. It is not so: water is not an element. Among other wonders which chemistry has taught us, we have learned of what water is composed; and on another occasion we shall describe the way in which its elements may be obtained. K.

Celebration of the Fourth of July in New York.—On this day, the anniversary of American independence, all creation appeared to be independent; some of the horses particularly so, for they would not troop "in no line not nohow." Some preferred going sideways, like crabs; others went backwards, some would not go at all, others went a great deal too fast, and not a few parted company with their riders, whom they kicked off just to show their independence. And the women were in the same predicament: they might dance right or dance left; it was only out of the frying-pan into the fire, for it was pop, pop; bang, bang; fiz, pop, bang; so that you literally trod upon gunpowder. The troops did not march in very good order, because, independently of their not knowing how, there was a good deal of independence to contend with. At one time an omnibus and four would drive in and cut off the general and his staff from his division; at another, a cart would roll in and insist upon following close upon the band of music; so that it was a mixed procession—generals, omnibus and four, music, cart-loads of bricks, troops, omnibus and pair, artillery, hackney-coach, &c. "Roast pig" is the favourite "independent" dish, and in New York on the above day are "six miles of roast pig," viz. three miles of booths on each side of Broadway, and roast pig in each booth! Rockets are fired in the streets, some running horizontally up the pavement, and sticking into the back of a passenger; and others mounting slanting-dicularly, and Paul-Prying into the bedroom windows on the third floor or attics, just to see how things are going on there. On this day, too, all America gets tipsy.—*Captain Marryatt's Diary in America.*

Irish Dramatic Talent.—Difference of taste makes it difficult, if not impossible, to say which is the best comedy in the English language. Many, however, are of opinion that there are three which more particularly dispute the palm—namely, "She Stoops to Conquer," "The School for Scandal," and "The Heiress;" and it is remarkable that the authors of these three beautiful productions were all Irishmen—Goldsmith, Sheridan, and Murphy.—*Literary World.*

The Morning.—The *sweetness* of the morning is perhaps its least charm. It is the renewed vigour it implants in all around that affects us—man, animals, birds, plants, vegetation, flowers. Refreshed and soothed with sleep, man opens his heart; he is alive to Nature, and Nature's God, and his mind is more intelligent, because more fresh. He seems to drink of the dew like the flowers, and feels the same reviving effect.—*Illustrations of Human Life.*

Printed and Published every Saturday by Gunn and Cameron, at the Office of the General Advertiser, No. 6, Church Lane, College Green, Dublin.—Agents:—London: R. Groombridge, Panyer Alley, Paternoster Row. Manchester: Simms and Dinham, Exchange Street. Liverpool: J. Davies, North John Street. Birmingham: J. Drake. Bristol: M. Bingham, Broad Street. Edinburgh: Fraser and Crawford, George Street. Glasgow: David Robertson, Trongate.